

**REMARKS**

Favorable reconsideration is respectfully requested in view of the foregoing amendments and the following remarks.

**I. CLAIM STATUS & AMENDMENTS**

Claims 1, 5-7, 17, 19-21, 23 and 25-37 were pending in this application when last examined.

Claims 1, 5-7, 17, 19-21 and 26-37 were examined on the merits and stand rejected.

Claims 23 and 25 were withdrawn as non-elected subject matter.

Claims 1, 26, 28, 30 and 33 are amended to remove reference to the “modified sequence” language. Support can be found in the claims as filed.

Claim 5 is amended to replace “amino acid” with “molecule.” Support can be found in the claim as filed.

Claim 23 is amended to remove the extra “a” before “nitro group.”

Therefore, no new matter has been added by this amendment.

**II. INDEFINITENESS REJECTION**

In items 9-11 on pages 3-4 of the Office Action, claims 1, 5-7, 19-21, 33 and 35-37 were rejected under 35 U.S.C. § 112, second paragraph, as indefinite for “at least one amino acid selected from . . . phenyllactic acid” in claim 5 and “one to several modifications.”

The present amendment deletes the “modifications” language in claims 1, 26, 28, 30 and 33.

Claim 5 is amended to recite “molecule” instead of “amino acid” as phenyllactic acid is a chemical molecule, and not an “amino acid” as noted by the Examiner..

In view of these amendments, the indefiniteness rejection under 35 U.S.C. § 112, second paragraph, is untenable and should be withdrawn.

### III. WRITTEN DESCRIPTION REJECTION

In item 12 on pages 4-7 of the Office Action, claims 1, 5-7, 19-21, 26, 28, 30, 32, 33 and 35-37 were rejected under 35 U.S.C. § 112, first paragraph, on the basis that the specification lacks written description support for the broad genus of variant polynucleotides encompassed by the claims in the biosynthesis pathway from chorismic acid to p-aminophenylpyruvic acid. The Examiner contends that “a modified sequence” and “wherein the modified sequences have one to several modifications selected from the group consisting of a substitution, a deletion, an insertion, and an addition” make the claims overly broad. In this regard, at the bottom of page 5, it was indicated that such language is essentially limitless regarding the potential modifications.

It is respectfully submitted that the present amendment overcomes this rejection as applied to the amended claims.

The amended claims are drawn to the specific SEQ ID NOS: 1-6 and the chemical formulae for PF1022 and the derivative thereof as exemplified in the disclosure. Accordingly, written description for the amended claims is satisfied by disclosure of: (1) a reduction to practice for each claimed embodiment (the making of the specifically deposited microorganism and transformant); (2) a reduction to drawings/chemical formulas (SEQ ID NOS: 1-6 & the chemical formulae); and (3) relevant identifying characteristics sufficient (such as structure or other physical and/or chemical properties) to describe the claimed invention in full, clear, concise and exact terms (SEQ ID NOS: 1-6 & the chemical formulae). Based on this disclosure, it is clear that the Applicant had possession of the amended claimed invention at the time of filing.

In view of the above, the written description rejection of claims 1, 5-7, 19-21, 26, 28, 30, 32, 33 and 35-37 under 35 U.S.C. § 112, first paragraph, is untenable and should be withdrawn.

#### **IV. ENABLEMENT REJECTION**

In item 13 on pages 7-10 of the Office Action, claims 1, 5-7, 19-21, 32, 33 and 35-37 were rejected under 35 U.S.C. § 112, first paragraph, on the basis that while the specification is enabling for transformants of Mycelia sterilia containing genes encoding SEQ ID NOS: 2, 4 and 6 that make para-substituted PF1022, wherein the substitution is a -NO<sub>2</sub> or -NH<sub>2</sub> functional group, it is not enabling for any transformant to make a peptide or depsipeptide having a benzene ring substituted at para-position with a nitro or amino group using a gene encoding a “modified sequence” of SEQ ID NOS: 2, 4 or 6.

It is respectfully submitted that the present amendment overcomes this rejection as applied to the amended claims.

Again, the claims have been amended to remove the “modifications” language, and thus, the claims are limited to the specific transformants of Mycelia sterilia containing genes encoding SEQ ID NOS: 2, 4, and 6 and the specifically disclosed metabolite, PF1022 and derivative thereof, as defined by their chemical name and formulae. In other words, the amended claims are limited to that which the Examiner indicated is enabled. Thus, the enablement rejection of claims 1, 5-7, 19-21, 32, 33 and 35-37 under 35 U.S.C. § 112, first paragraph, is untenable and should be withdrawn.

#### **V. ANTICIPATION REJECTION**

In item 14 on pages 10-11 of the Office Action, claims 26, 28 and 30 were rejected under 35 U.S.C. § 102(b) as anticipated by Blanc et al., Microbiology, vol. 23, no. 2, pp. 191-202 (1997).

It is respectfully submitted that the present amendment overcomes this rejection as applied to the amended claims.

On page 11 of the Office Action, it was indicated that the prior art rejection was maintained on the basis that the claims are directed to “modified sequences” of the specifically

designated SEQ ID NOS. As noted above, the claims have been amended to remove reference to the "modified sequence" language. Accordingly, the claims are limited to the specifically disclosed SEQ ID NOS. It is respectfully submitted that Blanc fails to disclose the specifically disclosed SEQ ID NOS.

In view of this amendment, the anticipation rejection under 35 U.S.C. § 102(b) over claims 26, 28 and 30 is untenable and should be withdrawn.


### CONCLUSION

In view of the foregoing amendments and remarks, the present application is in condition for allowance and early notice to that effect is hereby requested.

If the Examiner has any comments or proposals for expediting prosecution, please contact the undersigned attorney at the telephone number below.

Respectfully submitted,

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